

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER POR PATENTS PO Box 1450 gains 22313-1450 www.upub.com

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/752,651	01/07/2004	Richard C. Fuksa	4447-103017-US	4106
7590 06/06/2011 James B. Conte			EXAMINER	
Husch Blackwell Sanders LLP Welsh & Katz			SCHNEIDER, CRAIG M	
Floor 22 120 South Riverside Plaza			ART UNIT	PAPER NUMBER
Chicago, IL 60606-3912			3753	
			MAIL DATE	DELIVERY MODE
			06/06/2011	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

1	RECORD OF ORAL HEARING
2	UNITED STATES PATENT AND TRADEMARK OFFICE
3	
4	BEFORE THE BOARD OF PATENT APPEALS
5	AND INTERFERENCES
6	
7	
8	Ex Parte RICHARD C. FUKSA and JUN ZHU
9	
10	1 2000 00000
11	Appeal 2009-009839
12	Application 10/752,651
13	Technology Center 3700
14 15	
12	
16	Oral Hearing Held: Thursday, February 10, 2011
17	
18	
19	Before WILLIAM F. PATE, III, STEFAN STAICOVICI and FRED A
20	SILVERBERG, Administrative Patent Judges
21	
22	
23	ON BEHALF OF THE APPELLANT:
24	
25	JAMES B. CONTE, ESQ.
26	Husch Blackwell LLP
27	120 South Riverside Plaza, Suite 2200
28	Chicago, Illinois 60606
29	(312) 526-1559

Application 10/752,651

The above entitled matter came on for oral hearing on 1 2 Thursday, February 10, 2011, commencing at 9:23 a.m., at the U.S. Patent 3 and Trademark Office, 600 Dulany Street, Alexandria, Virginia, before Lori Allen, Notary Public. 4 5 JUDGE PATE: Good morning, Mr. Conte. 6 MR. CONTE: Good morning, panel. 7 8 JUDGE PATE: We are up to speed on this case, technology-wise, and we'd like to hear your arguments about patentability. 9 MR. CONTE: Okay. My key argument, gentlemen, is that if 10 you look at Claim 1 of our application, it requires that the pin that holds the 11 valve into the valve plate, sheers the valve plate as it is inserted into the hole. 12 13 The key argument that I am putting forth is that none of the 14 references cited by the Examiner show sheering. The primary reference 15 relied on by the Examiner for sheering is Miller. The Examiner points to Figure 4-B, which has an undercut shoulder, but if you read the patent, there 16 are several instances that make it clear that structure is not used for sheering. 17 First, if you were to look at Figure 3 of Miller, you would see 18 that the configuration of the holes in which the dowel is supposed to fill, that 19 dowel fills all of the entirety of the hole. If there was sheering coming 20 down, that would create a block. 21 That is what my client wanted to do, which was eventually 22 23 block the -- cause sheering to block the pin from entering into the valve plate. That would not work with Miller, because it would prevent the dowel 24

Application 10/752.651

1 from fitting nicely in the drilled holes.

Miller at Column 1, lines 60 to 65, specifically says that the component openings are designed to accept the dowel, which leads away from sheering, and at Column 2, lines 26 to 28, it says the drill bit is designed to create openings that the dowel will fit into. Again, that cuts away from sheering.

At Column 4, lines 37 through 39, the drill bit is dictated by the dimension of the drilled sections. The only mention of Figure 4-B is in a single line that simply says here's a way the dowel could look. No mention of sheering.

That is probably our key argument, that there is nothing in the art to show sheering, and sheering was -- even if you were to say that somehow there is sheering with that component, 4-B of Miller, it wouldn't be picked up on by someone wanting to improve the valve of the primary reference, Wise, because Wise has a head on top of the pin that prevents the pin from going too far into the aperture that holds it.

The whole key of our invention was that our pin is constantly pounded by a reciprocating diaphragm, and a way, the inventive way, of keeping it going too far into the aperture is to have it sheered so the sheering sort of prevents a block so it can't go down any further when it's getting pounded on, and you can still have an aperture longer than the pin, so you can just quickly insert it, you don't have to say well, make sure it stops, because the pin will exactly be on the hole's floor. You can just quickly sheer it in there, and it stops enough to resist that pounding.

Appeal 2009-009839 Application 10/752,651

1	At most, someone looking at Miller Miller talks about press
2	fit, the need to press fit. At most, you would simply pick up well, maybe a
3	way to stop the pounding is a simple press fit, a tight fit between the
4	diameter of the hole and the diameter of the shank.
5	Moving on to Claim 2, an additional reason for allowability
6	with Claim 2 is again we specifically specify that the shank is a lesser
7	diameter than the hole, but the reference relied on by the Examiner again is
8	Miller, and Miller specifically says the opposite.
9	Miller specifically says in the application that the shank should
10	be larger than the diameter of the hole to have a press fit. Again, that
11	element is not met anywhere in any of the cited references.
12	With regard to Claim 3, quite frankly, I don't see any value of
13	arguing PEEK. If you were to find Claim 1 was false, I couldn't really sit
14	here and now argue for Claim 3.
15	Those are really my arguments.
16	JUDE PATE: Okay. Judge Silverberg?
17	JUDGE SILVERBERG: Quick question. Looking at Miller in
18	Column 5, it talks about the frictional forces, basically line 55. It talks about
19	the diameter, as you had stated, the diameter being greater in size than the
20	diameter of the openings, and it is held tightly by frictional force.
21	It says the step acts similar to a head of a nail.
22	MR. CONTE: Right. That would at most show head of a
23	nail. As I read that, the head of a nail could be slightly pounded into the
24	surface, but that is not going to sheer it off. At most what would happen

Appeal 2009-009839 Application 10/752,651

with that undercut shoulder is there is going to be a beveled reciprocating hole that it's going to go around and because it's like this (Indicating), it will anchor it like that. It's not going to sheer it.

If there was sheering, the dowel wouldn't fit in. You couldn't get it in. You could not literally get that dowel into the holes. You would destroy the -- part of the invention is the drill bits used to machine these holes.

JUDGE SILVERBERG: Drill bits and machines the hole initially, and then you would have the diameter of the shank being greater than the diameter of the hole, so you can force fit --

MR. CONTE: It's perceived to be wood, so there will be some compression of the wood, but it's not going to sheer off because if it would, it would literally clog up the line of entry for the dowel, and there is nowhere for it to go.

Only if you know you want that clogging, like we did, then you would want sheering. Otherwise, you are going to wind up with what they say, which is press fit. Even when they talk at 55, 4-A, that is concave, and that is, I guess, so it won't break off, which is different than the convex, which really is just if they were to make the dowel hole the same shape, it would be something like this (Indicating), and it would go on like that (Indicating), so it has a little bit more of an anchor.

It is not going to sheer it as it is being entered. Otherwise, literally -- one of the objects of the invention at Column 1, line 40, was to prevent defamation of the objects being joined by dowels.

Appeal 2009-009839 Application 10/752,651

1	The last thing they would want to do is start sheering off pieces
2	of wood for furniture and stuff. They want to have as little defamation as
3	possible.
4	I just think it reads too much into 4-B. There is simply not
5	enough evidence that sheers. There is a lot of commentary in the application
6	that it would not.
7	That's all I have to say.
8	JUDGE PATE: I have no further questions for you either. Do
9	you have a card for the Court Reporter?
10	MR. CONTE: I sure do.
11	JUDGE PATE: We are going to take this case under
12	advisement.
13	MR. CONTE: Thank you very much.
14	(Whereupon, at 9:32 a.m., the proceedings were concluded.)
15	* * * *